

East Lothian Council Countryside Rangers

May 2020



MUD in your EYE

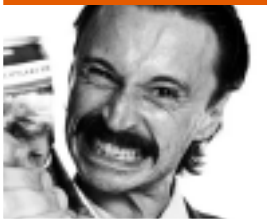


Wildlife

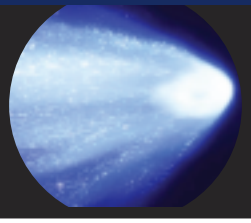
Swallows, Swifts and Martins

Pages 4 and 5

Quiz



Heavens above



Butterflies





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Welcome to the 45th Edition of 'Mud in Your Eye'

We'd love to hear from you!
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 East Lothian Countryside
Ranger Service

Published by East Lothian Council's
Countryside Rangers

Editorial – Covid 19 lockdown

It's not often that we resort to newspaper style editorials in this magazine, but as I write this, we are in the middle of the Covid 19 lockdown. The advice is to stay at home, take your one daily exercise locally and don't attempt to drive to countryside sites.

As a result, this publication takes on a slightly different feel than usual, with no events to advertise, no volunteer updates and no 'out and about' section. It will also be in electronic form only.

We do hope, however, that the articles we have produced are entertaining as well as informative. We have included a list of on-line resources and educational material that you can use at home, a chance to join in with a garden bioblitz and even a short East Lothian geography/history quiz for you to have a go at over your morning coffee break.

East Lothian Geography Quiz

1. Which East Lothian place has the same name as a character from Trainspotting?
2. Which British Prime Minister was born in Whittingehame House
3. A declaration bearing his name was a statement made to the UK Government in 1917. What was it in support of?
4. The Rev John Witherspoon was born in which East Lothian village?
5. He is famous in the USA for being one of the 12 signatories to what?
6. What age was John Muir when he left Dunbar with his family to live in the USA?
7. How long did the battle of Prestonpans last? 20minutes; 2 hours or 6 hours?
8. What is the highest point in East Lothian?
9. Which island is said to be the inspiration for Robert Louis Stevenson's Treasure Island?
10. In what other of his novels is it mentioned?
11. Which prog rock band also mention the island in the lyrics of their song 'Warm, Wet Circles'?
12. Can you find the following sites in East Lothian?
 - A) A small hill with the same name as the composer of the hymn 'Hark The Glad Sound'
 - B) A farm with the same name as a middle-east city
 - C) A village that translates as 'Church at the head of the wood'.



Answers can be found on back page

Swallows, Swifts and Martins

Which of the following birds is the odd one out?

Blackbird, Swallow, Swift, House Martin, Sand Martin.

The answer, perhaps surprisingly, is swift. The others are all related, being part of the Passeriformes, or Perching Birds, whereas the swift is unrelated, and is part of a small group known as the Apodiformes, which roughly translates as 'legless', a reference to the swifts short stubby legs.



Perching swallows.

Despite this, the swift shares one or two characteristics with swallows and martins, including wings adapted for acrobatic flight and hunting for small insects on the wing. This is often referred to as convergent evolution, and explains how often unrelated species can become adapted to exploit similar environmental niches.

All species are migratory, making journeys of thousands of miles from Africa, to spend the summer here. The insects that they feed on are hard to come by in winter, hence the need for the long journey to warmer climates. This may be changing, however, as some individuals of our migratory species are remaining further north than expected with warmer winters becoming the norm.



The glossy black male blackbird.

A recent record from the British Trust for Ornithology confirms that at least one swallow survived the winter in Cornwall! The first to return are usually sand martins, often as early as March. These are the smallest of the five species, and as their name suggests, they tend to nest in sandy banks, river banks and cliffs. Their plumage matching the dark sandy substrates that they prefer.

House martins and swallows return in April. The distinct black and white plumage and short, slightly forked tail of house martins make them easy to spot as they fly around our towns and villages, often nesting under the eaves of houses. Swallows, or perhaps more correctly speaking, barn swallows for the pedantic among you, are usually more rural in their choice of habitats, often nesting in barns and other farm buildings.

Swallows, Swifts and Martins - Continued



A swift in flight - the odd one out.

They differ from house martins when seen on the wing by their long tail streamers. Closer inspection will reveal a red forehead and chin.

Swifts arrive last, turning up in May, and leaving by the end of August. A fleeting visit, which leaves only time for one brood per year. Swifts are fabulous aerial acrobats and are perfectly adapted to a life in the air. So much so, that they rarely ever come down to land, except to nest. In fact, they are so well adapted to the air, that if they become grounded, they may not be able to take off again. They mate, eat, drink, and even sleep on the wing (although their sleep patterns differ greatly from our own).

One of the best spectacles of the natural world is to see and hear a flock of swifts screaming around the rooftops as if in some form of race to see who can make the circuit first.

Heaven's Above – comets

We often think of comets as rare because we just can't see them. There are, however, over 6000 known comets, with some scientists estimating that there may be as many as a trillion comet like bodies out there in our solar system.

One such comet will be nearing the earth this May, although you will need a pair of binoculars to spot it. It will be high in the night sky, close to the pole star, with the best view around May 14th. It goes under the very technical name of C/2017 T2 Pan STARRS!

Comets originate from two locations in the solar system. Long-period comets come from the Oort cloud, which is a shell of icy dust on the outer reaches of the solar system almost a light year from the sun. Short period comets tend to originate from the Kuiper Belt, which is just beyond Neptune and consists largely of frozen bodies made up of methane, ammonia and water. It is also home to the dwarf planets Pluto, Haumea, Ceres, Eris and Makemake.

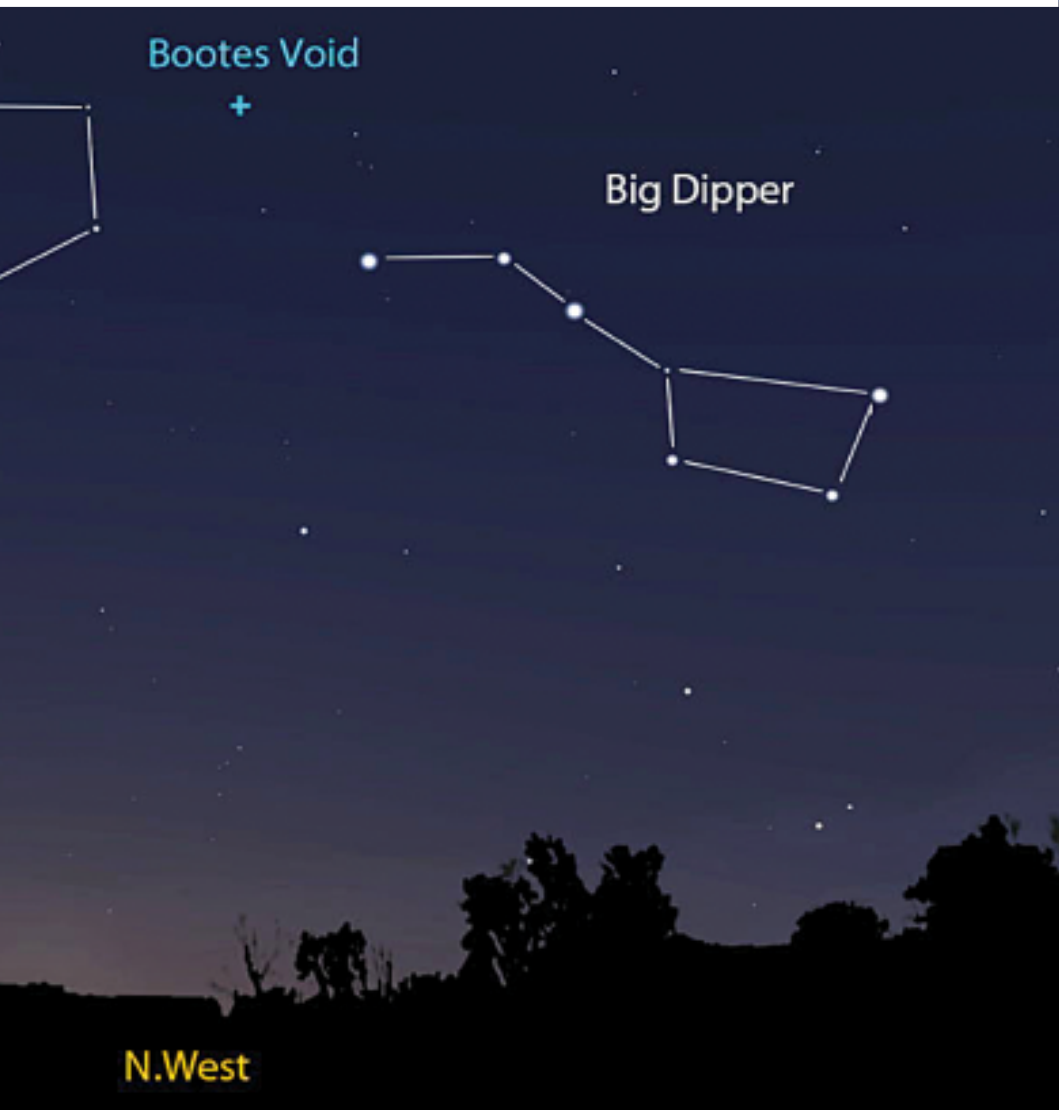
If searching for faint comets is not your thing, then there are two bright stars worth noting at this time of year which can easily be seen with the naked eye. Regulus in the constellation of Leo and Arcturus in the constellation of Bootes. Both of these can be found by using the Plough as a guide. If you imagine the plough as a saucepan, then if it leaks, it will spill directly on to the head of Leo, the lion. The head and chest of Leo are marked by a backwards question mark of quite bright stars. The brightest star at the base of the question mark is Regulus. Regulus is actually a system of four stars, the main star of which, Regulus A, is a blue/white coloured star three times as massive as our sun. If you follow the curve of the handle of the plough, it will point to Arcturus, which is the fourth brightest star in the night sky. It is a red giant, about 25 times the diameter of the sun. It is relatively close to us, astronomically speaking, being 37 light years away. There are a number of stories connected with Bootes.



Comets – Continued

In one he is depicted as a herdsman; in another he is Arcas the son of Zeus and Callisto; in yet another he is a grape grower called Icarius who became a friend of the Greek god Dionysus (no surprises there!).

Regulus and Arcturus are linked in literature. For the Harry Potter aficionados among you, you will recall that Sirius Black's brother was called Regulus Arcturus Black.



Butterflies = longer hotter days

As the days get warmer (and longer) there will be more and more butterflies out and about in our countryside. One of the earliest fliers is the orange tip, a member of the Pieridae family, which includes all of the common, white butterflies. The males of this species are very conspicuous, having a bright orange flash on each wing-tip (hence the name).



The orange tip, a showy male - typical.

The females are less showy, having a black tip to the wings, and are easily mistaken for other similar butterflies. When seen at rest, both males and females have a distinctive green mottling on the underside of the wings, which acts as a superb camouflage. Orange tip caterpillars are fussy eaters (like most caterpillars, in fact). Two foodplants are preferred, depending on the habitat. In damp areas the caterpillars will feed mostly on cuckoo flower, whilst in drier conditions garlic mustard is more usually eaten. Some other foodplants are utilised, all of them within the cabbage family. This group of plants, as many an irate vegetable grower will testify, is the favourite food of all the white butterfly caterpillars. Orange tips have been a familiar part of our countryside for many years.

Speckled wood butterfly.



The same cannot be said of the speckled wood. This butterfly, as its name suggests, is a species of woodlands and shady hedgerows, where it can be seen flying through dappled sunlight or perching in open areas. Historically found throughout most of England and in the north and west of Scotland, this species is actually increasing its range. As a result, it is colonising new areas including East Lothian; which is nice and now means that these beautiful insects are a relatively common sight.

Males and females look very similar, both being dark brown with off-white spots. The underside of the wings has a more mottled appearance without the clear markings.

Butterflies – Continued

Unlike most butterflies, speckled woods are rarely seen feeding on the nectar found within flowers. Instead they prefer honeydew – a sweet, sticky liquid produced by aphids and secreted onto leaves. They do occasionally feed on nectar, but this tends to be early or late in the summer when aphid numbers are low. The caterpillars of the speckled wood are green and, frankly, not much to look at (although well camouflaged as a result). They are found feeding on various common grasses such as Yorkshire fog and Cock's-foot – what great names these grasses have. Peacocks are a species to look out for throughout the spring and summer, with adults emerging from hibernation earlier than most species and remaining in flight later than many other species. The great thing about the peacock is that it's so distinctive and, like its avian namesake, is easy to identify. The (mainly) red wings carry large "eyespot" patterns, which are thought to frighten and confuse potential predators, especially birds. By contrast, the underside of the wings are dull brownish-black, which provides excellent camouflage when the butterfly is at rest or hibernating.



The beautiful peacock butterfly.

As if these defences weren't enough, the peacock can also produce a hissing sound by rasping its wings – this seems to be a very effective deterrent against small mammal predators.

Male peacocks are very territorial and have been observed attempting to chase away small birds that get too close. These territories are often based around patches of nettles. The nettle is the main food plant of peacock caterpillars and therefore attracts females looking for suitable sites to lay their eggs. All of which is a good reason for us to cherish our nettle patches. We should all embrace the nettle – metaphorically speaking.

The dark green fritillary is one of our largest butterflies and is very distinctive, with its powerful flight, large size, and bright orange and black colouring. At first glance it's difficult to spot anything green (dark or otherwise) about this butterfly, but seen at rest the underside of the hindwings have an obvious greenish hue, along with large silvery-white spots. There are several similar species found in Scotland, but this is by far the most common in East Lothian, so there's a good chance that any fritillary you see will be one of these.



Small skipper butterflies.

Butterflies - Continued

Dark green fritillaries are most often seen in coastal grasslands, especially those which include areas of bracken. There's nothing about the bracken per se that these butterflies like – it doesn't produce nectar for the adults to feed on, and it's not a favourite foodplant for the caterpillars. What it can provide is a mosaic of habitats which suit this species perfectly. The adults lay their eggs within dead bracken and leaf litter, which also provides a warm microclimate for the larvae after hatching. In addition, the bracken acts as a shelter belt for the open grassy areas and, in particular, for various species of violets on which the caterpillars feed. Bracken is often considered a bit of a weed and is cleared from many areas to prevent it overtaking grasslands, but clearly in the right place at the right time it can be very valuable for wildlife.

Let's be honest, the dark green fritillary is a bit of a brute - in relative terms, at least. So, let's head to the other extreme and look at one of our smaller species, the small skipper (the clue's in the name really). This is a butterfly which can be easily overlooked, as it spends much of its time sunbathing or resting in vegetation. It's often only a sudden darting movement and a glimpse of orange-brown which calls attention to it. Even when seen clearly, its furry body, almost triangular shape and habit of resting with wings open could lead to it being misidentified as a moth. (Not that there's anything wrong with moths of course, apart from the ones that eat your carpets).



Dark green fritillary butterfly.

Small skippers can be found in many grassy habitats, including roadside verges and woodland clearings. Your best bets in this part of the world are probably coastal grasslands such as those at Gullane or Yellowcraig - anywhere with tall grasses with plenty of wildflowers. The wildflowers provide nectar for the adults, while the grasses are the food plants for the caterpillars. A particular favourite of the latter is the aforementioned Yorkshire fog, a grass common throughout the county. Butterflies can be seen across the county, in all sorts of habitats. This is a positive godsend, given the strange conditions that we find ourselves living in at the moment. You won't need to travel far to see butterflies, just find yourself a warm day and a view of some flowers (they can be humble dandelions) and sooner or later there'll be butterflies.

Confusion corner, periwinkle – an inexperienced approach to separating common species

“A sea snail!” is the cry from many children when confronted with one of the edible periwinkle shells left on the beach as the tide recedes. In some parts of the UK this is indeed the traditional name but collectively we have grown somewhat distant from this hitherto familiar species, after millennia of winking the ‘whulks’ meat with toothpicks (and their forerunners). In the mid-19th century as many as 3 million pints of winkles were consumed on London’s streets!

The rocky European coastline is a principal habitat for several closely related species. Here they feed on seaweeds and lichens with their rough tongue (or radula) but to help in identifying them you are best to move from the beach onto the rocky shore where their different habitat preferences can give hints to ID.

The sun and wind battered splash zone rocks and upper shore provide a home for the rough periwinkle group, of which sub-species identification is best left to the specialist. They are experts at survival, firmly closing their door (or operculum) to keep their gills functioning by stopping them drying out. They also brood their young, releasing them as small shelled versions of the adult. This is a good adaptation to the extreme environment, where access to the sea is more limited and prone to the extremes of wave action. Other species tend to release larvae into the plankton, where it will eventually develop through stages into the adult form. The rough periwinkle has a deeply grooved shell and a more intricate ID feature where the opening (or aperture) meets the body whorl at right angles. Look also for the appropriately named, but far less common black-lined periwinkle in this zone also.

A slippery stroll into the mid-tide zone (top tip: wait till the tide is out!) will lead you quickly to encounters with the large, dark coloured edible periwinkle, abundant on all

but the most exposed shores. The white aperture, pointed spiral shell, and also the acute angle of where the opening meets the shell are important features.

As you near the seas edge at low tide, you will be in the habitat of the flat periwinkle with its pretty, coloured shell, ranging from yellow to green, brown or even orange. Its key identifying feature is a distinctly flattened spiral. They feed on larger seaweeds (eg. wrack species) but despite the bright colours they can be awkward to spot. This genetic polymorphism helps them to blend in to the colourful habitats of the lower shore to avoid predation. Two flat periwinkle species exist but again separating them requires a blush inducing description that is not going to be attempted here!



*Edible
periwinkle*



Rough periwinkle.

Educational and Activity Resources

In these times of being cooped up in the house, you may be looking for activities to do with the children, or even for yourselves. The following are lists of resources to use and activities to do with a wildlife emphasis.



An online group for environmental education and nature connection with a 9-week challenge has been established by Scottish Badgers in association with the Wildlife Trusts. There is a different topic each week centred on wellbeing and environmental education. There are indoor, garden and daily exercise options and participants can work towards Bronze, Silver or Gold certificates, or none!

https://www.facebook.com/groups/letsnoticenature/learning_content/

The environmental charity Earthwatch Europe have established Wild Days, a subscription* service with daily/weekly environmental activities. *free access is being given to schools to support key workers and discounts are available to schools generally. **www.wild-days.org**

Some fantastic fun online educational games can be found at:

<https://www.rspb.org.uk/fun-and-learning/for-kids/games-and-activities/>

When you are out for a walk, grab the basic materials you need to make a simple bug hotel that minibeasts will thank you for all summer long:

One for window ledge:

<https://schoolgardening.rhs.org.uk/resources/activity/make-a-simple-bug-or-ladybird-home>

Or a fancier one if you have space:

<https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/build-a-bug-hotel/>

Educational and Activity Resources – Continued

Or perhaps try making a bird bath:

<https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/maketheperfectbirdbath/>

If you are looking for some wildlife monitoring activities to do, then the British Trust for Ornithology are inviting people to send them records of the birds and other wildlife visiting their garden.

For more details go to:

<https://www.bto.org/>

If you have a bird guide, that will help, but if not, check out the following online guide from the RSPB.

[\(https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/identify-a-bird/\)](https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/identify-a-bird/)

Butterfly Conservation are keen for records of butterflies that visit your garden. Go to

<https://butterfly-conservation.org/butterflies/recording-and-monitoring> for how to submit records as well as tips on gardening for butterflies.

Why not challenge yourself to improving your Bird ID skills with the online quizzes and formal exams provided free by Nord University: <https://www.natureid.no/bird> which also has an excellent and free to download bird identification app..

...And if nothing else, sit back and enjoy the Osprey action from the SWT online camera at Loch of the Lowes

<https://scottishwildlifetrust.org.uk/thin gs-to-do/watch-wildlife-online/loch-of-the-lowes-webcam/>



Keep the vampires at bay!

At this time of year you may well walk through your local woodland and get a strong smell of garlic. There are a couple of plants that may be responsible for the smell – Wild Garlic or Few-flowered Leek. However, one is native and the other isn't.



Wild garlic on the left, with Few-flowered leek to the right. A. Marland.



Wild garlic, also known as Ramsons, is native and easily recognisable with its large white star-like flowers. It is common and widespread across the UK favouring deciduous woodland and chalky soils. You can also spot it in scrub and hedgerows but it prefers damp areas. It is an ancient woodland indicator, so if you spot it whilst out and about you may well be standing in a very special place!

It flowers early in the spring so it is a vital early food source for many insects. The leaves and flowers are edible. Young leaves appear from March are delicious added to soups, sauces and pesto and are best picked when young. The flowers emerge from April to June and can add a potent garlic punch to salads and sandwiches. Closely related to onions and garlic, ramsons similarly grows from bulbs. In continental Europe, the bulbs are thought to be a favourite food of brown bears, hence the plant's scientific name *Allium ursinum* (bear leek). For us it has many health benefits. It was traditionally used as a spring tonic due to its blood-purifying properties, similar to bulb garlic, and is also thought to lower cholesterol and blood-pressure, which in turn helps to reduce the risk of diseases such as heart attack or stroke.

Keep the vampires at bay! – Continued



If you come across a plant that looks a bit like wild garlic, but has narrower leaves and less of a garlic smell, you are likely to have found the non-native **Few-flowered leek**. These aren't like the large leeks we tend to buy, they're small and much more closely resemble spring onions. The plant gets its name from the fact that it has fewer flowers than you might expect, but it makes up for this by producing lots of bulbils (tiny secondary bulbs).

It started as a popular garden plant but made its way into deciduous woodlands and along hedgerows and river banks.

Wild Garlic Pesto recipe

(BBC Good Food)

You will need:

- 150g wild garlic leaves
- 50g parmesan
- 1 garlic clove, finely chopped
- ½ lemon zested and a few squeezes of juice
- 50g pine nuts, toasted
- 150ml rapeseed oil

1. Rinse and roughly chop the wild garlic leaves.
2. Blitz the wild garlic leaves, parmesan, garlic, lemon zest and pine nuts to a rough paste in a food processor. Season, and with the motor running slowly, add almost all the oil. Taste, season and add a few squeezes of lemon juice.
3. Transfer the pesto to a clean jar and top with the remaining oil. Will keep in the fridge for two weeks.

It forms very dense carpets of leaves in spring, smothering and out-competing native species, particularly early-flowering plants like primrose, which live in similar habitat types. The bulbils help it to spread, particularly where grazing animals such as deer carry it to new areas on their feet. It can be very invasive in disturbed habitats, and is increasingly abundant throughout its range, especially in southern Scotland. Like wild garlic it is also edible and can be used in similar ways in soups, pesto, hummus, salads, as well as whole in place of spring onions.

How to forage responsibly

Always be sure you can positively identify any plant before you pick it, and never eat any plant you are unsure of. When foraging, ensure you leave plenty for wildlife.

Here are a couple of key foraging guidelines:

- Seek permission before foraging. In certain areas, plant species will be protected so it is important to do some research and check with the landowner before you start gathering.
- Only pick from areas that have a plentiful supply. Look for areas where you can find food in abundance and then only collect a small amount for personal use. Never completely strip an area as this could damage the species and deny another forager the chance to collect.
- Leave enough for wildlife and avoid damaging habitats. Many animals rely on plants for survival, so never take more than you plan to eat as this could also deny wildlife from a valuable food source. Be mindful about wildlife habitats and avoid disturbing or damaging.
- Never pick protected species or cause permanent damage. Britain's wild plants are all protected under the Wildlife and Countryside Act (1981), which makes it illegal to dig up or remove a plant. Check the law before you forage or if in doubt.

Gardening for wildlife

Being as we are all being told to stay at home at the moment, now is the perfect opportunity to encourage wildlife into your garden. Even if you don't have a garden there are small things you can do to make a big difference. Try some of the ideas below this spring.



FOOD

Feed the birds all-year round to keep their energy levels up over the nesting season. Put a bird feeder up in your garden, stick a small feeder to your window or scatter some seeds or mealworms on a ledge. Make sure you take off fat ball mesh covers to avoid entanglement, chop up nuts to avoid choking and avoid bread products, which are dry to swallow, hard to digest, and dehydrating.

WATER

As the weather warms, fresh water becomes harder for wildlife to find. Put water outside in a birdbath or in a small low-sided dish. Raise these up on a slab or brick to stop other wildlife falling in and place a small stone in it to help with getting in and out.

HOMES

If you have a garden, make a compost heap for all your garden waste. The heat released breaks down plant nutrients to form free soil to use in your window box, pots or garden. Compost heaps also give wildlife shelter, especially slow worms who love the warmth.

Common pipistrelle bat.



Gardening for wildlife – Continued

PLANTS

Whether you have a garden, a window box or a few small pots, try planting some nectar rich flowers to benefit bees and butterflies. Species such as poppies, corn marigolds, rock rose, ivy and lavender work well, as well as honeysuckle and evening primrose that release pollen at night, perfect for attracting moths and bats. Alternatively, why not plant herbs like fennel, rosemary and thyme that you can use in cooking too? Encourage any wild flowering plants growing naturally such as clover, ragged robin and foxgloves as these are great for insects.

Avoid using chemicals in your garden where possible. These can be toxic to wildlife as well as pets and people, and avoid unsustainable products such as peat-based composts. If you can encourage insects such as ladybirds and birds into your garden, they will take care of insect pests for you.

Avoid cutting back trees and hedges at this time of year to avoid damaging or disturbing nesting birds.

Why not spend some time watching the wildlife that visits your garden, and perhaps record those species

The British Trust for Ornithology are inviting you to take part in a citizen science project by watching the wildlife outside your window, and recording the birds and other wildlife that visits. Go to **www.bto.org** for more details.

Butterfly Conservation are keen for records of butterflies that visit your garden. Go to **<https://butterfly-conservation.org/butterflies/recording-and-monitoring>** for how to submit records as well as tips on gardening for butterflies.



East Lothian Geography Quiz – Answers

1. Which East Lothian place has the same name as a character from Trainspotting?
Begbie
2. Which British Prime Minister was born in Whittingehame House
Arthur Balfour (Prime Minister 1902-1905)
3. A declaration bearing his name was a statement made to the UK Government in 1917. What was it in support of?
The Balfour Declaration was a proposal for the creation of a Jewish homeland in Palestine
4. The Rev John Witherspoon was born in which East Lothian village?
Gifford
5. He is famous in the USA for being one of the 12 signatories to what?
The American Declaration of Independence
6. What age was John Muir when he left Dunbar with his family to live in the USA?
11
7. How long did the battle of Prestonpans last? 20 minutes; 2 hours or 6 hours?
20 minutes (Sir John Cope's forces were routed in a surprise attack by Prince Charles Highlander army)
8. What is the highest point in East Lothian?
Meikle Says Law in the Lammermuir Hills
9. Which island is said to be the inspiration for Robert Louis Stevenson's Treasure Island?
Fidra
10. In what other of his novels is it mentioned?
Catriona
11. Which prog rock band also mention the island in the lyrics of their song 'Warm, Wet Circles'?
Marrillion
12. Can you find the following sites in East Lothian?
A) A small hill with the same name as the composer of the hymn 'Hark The Glad Sound'
Dodridge – on the border with Midlothian
B) A farm with the same name as a middle-east cit
Jerusalem – between Pencaitland and Haddington
C) A village that translates as 'Church at the head of the wood'.
Pencaitland (From the Brythonic 'Pen Goed Llan')